

Title (en)

Radio transmitting apparatus, radio receiving apparatus, and radio transmission method

Title (de)

Funkübertragungsvorrichtung, Funkempfangsvorrichtung und Funkempfangsverfahren

Title (fr)

Appareil de transmission radio, appareil de réception radio et procédé de transmission radio

Publication

EP 2568634 B1 20180530 (EN)

Application

EP 12007489 A 20021125

Priority

- EP 02783607 A 20021125
- JP 2001359964 A 20011126
- JP 2002031243 A 20020207
- JP 2002115537 A 20020417

Abstract (en)

[origin: EP1450506A1] When transmission is performed using the OFDM-CDMA method, subcarriers #1 through #m, #2m+1 through #3m, #3m+1 through #4m, and #4m+1 through #5m in which spread signals are allocated only in the frequency axis direction, and subcarriers #m+1 through #2m in which spread signals are allocated in both the frequency axis direction and the time axis direction, are formed, and these are transmitted simultaneously. <IMAGE>

IPC 8 full level

H04B 1/707 (2006.01); **H04B 1/7083** (2011.01); **H04J 11/00** (2006.01); **H04J 13/00** (2011.01); **H04J 13/16** (2011.01); **H04L 5/02** (2006.01); **H04L 7/00** (2006.01); **H04L 27/26** (2006.01); **H04W 28/18** (2009.01); **H04W 52/34** (2009.01); **H04W 72/04** (2009.01); **H04Q 11/04** (2006.01)

CPC (source: EP US)

H04B 1/7083 (2013.01 - EP US); **H04J 11/003** (2013.01 - EP US); **H04J 13/0003** (2013.01 - EP US); **H04L 5/0021** (2013.01 - EP US); **H04L 5/0044** (2013.01 - EP US); **H04L 5/006** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1450506 A1 20040825; **EP 1450506 A4 20060816**; AU 2002349462 A1 20030610; AU 2002365331 A1 20030610; CN 100559744 C 20091111; CN 1306740 C 20070321; CN 1493123 A 20040428; CN 1633769 A 20050629; EP 1370018 A1 20031210; EP 1370018 A4 20090121; EP 1370018 B1 20180110; EP 2568634 A1 20130313; EP 2568634 B1 20180530; EP 2571183 A1 20130320; JP 2003304218 A 20031024; JP 3727283 B2 20051214; US 2004071078 A1 20040415; US 2004208232 A1 20041021; US 2010008301 A1 20100114; US 2012087392 A1 20120412; US 7298722 B2 20071120; US 8102831 B2 20120124; US 8363632 B2 20130129; US 8737192 B2 20140527; WO 03047141 A1 20030605; WO 03047142 A1 20030605

DOCDB simple family (application)

EP 02803923 A 20021125; AU 2002349462 A 20021125; AU 2002365331 A 20021125; CN 02805389 A 20021125; CN 02805652 A 20021125; EP 02783607 A 20021125; EP 12007488 A 20021125; EP 12007489 A 20021125; JP 0212254 W 20021125; JP 0212255 W 20021125; JP 2002115537 A 20020417; US 201113331949 A 20111220; US 46667403 A 20030721; US 47002103 A 20030723; US 56120609 A 20090916